

# 2012 Kansas Environment Update

John Mitchell, Director



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**Our Mission: To protect and improve the health and environment of all Kansans.**

# Organizational Structure



- Five Bureaus and KHEL:

- Bureau of Air (BOA)
- Bureau of Water (BOW)
- Bureau of Waste Management (BWM)
- Bureau of Environmental Remediation (BER)
- Bureau of Environmental Field Services (BEFS)

Kansas Health and Environmental Laboratory (KHEL)

# Program Achievements



- Bureau of Air

- Issued 775 construction permits during State Fiscal Year 2012 (July 1, 2011 through June 30, 2012).
- Received approval on December 27, 2011 from EPA for the Kansas Regional Haze State Implementation Plan, allowing for continued improvements at existing electric generating facilities and enhancing economic growth for the State.
- Awarded a total of \$3.4 million through 29 projects under the Kansas Clean Diesel program, allowing Kansas companies, school districts, and individuals to add pollution reduction equipment to existing vehicles or add lower emitting vehicles to their fleet.

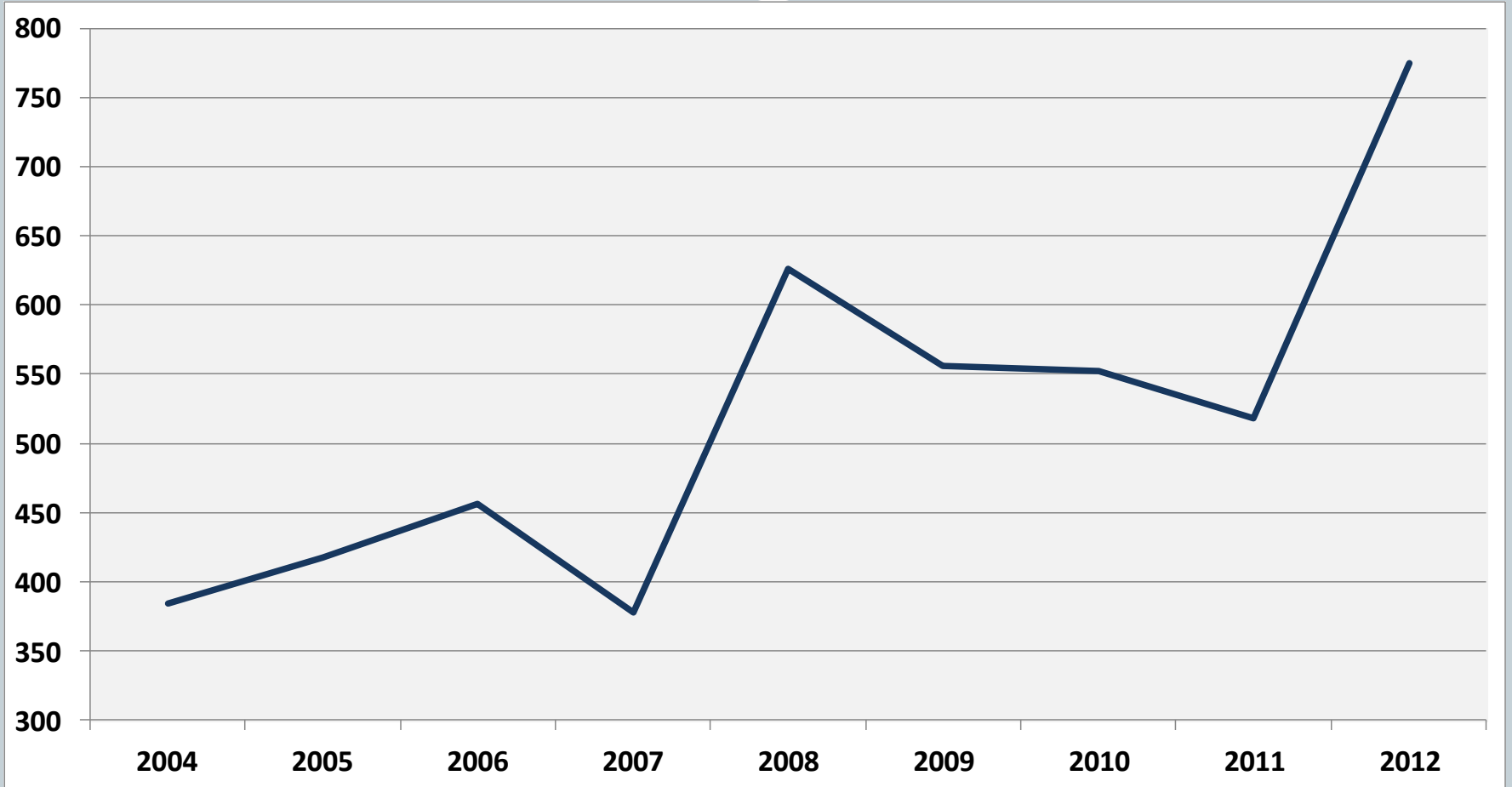
# Program Update



- Bureau of Air
  - Seemingly endless string of new federal regulations
  - Permitting
  - Regional Haze Approval
  - Ambient Air Quality Concerns

# Air Construction Permits

SFY 2004 - 2012



# Regional Haze SIP



- Approved by EPA December 27, 2011
  - Implementation through 2018
  - 7 year process to complete
  - Submitted October 26, 2009
- Total Reductions:

Utility	NO <sub>x</sub> (tpy)	SO <sub>2</sub> (tpy)
KCP&L	29,614.8	18,062.4
Westar Energy	24,480.0	63,201.0
TOTAL:	54,094.8	81,263.4

# Ambient Air Problem Areas



- Saline County – Nonattainment for Lead

- Exide has upgraded bag houses and process controls
- Currently working on modeling and SIP development

- Metro Ozone

- Current 2008 Ozone NAAQS = 75 ppb
- All counties designated attainment using 2008 – 2010 data
- Kansas City violated in 2011 and 2012
- Wichita violated in 2012

# Program Achievements



- Bureau of Water
- Led multiagency/stakeholder effort to develop a nutrient reduction framework for Kansas.
- The Kansas Clean Water and Drinking Water SRF programs jointly developed a new single Master Financing Indenture (MFI) to cross-collateralize the two separate funds.



# Nutrient Reduction Program



- Nutrient reduction in surface water is needed
  - Either we set the agenda, or others eventually will
- Numeric criteria problematic at this time
  - More time and study needed to develop
  - Likely to delay water quality improvements
- Shared nutrient reduction can produce results
  - Fiscally doable/The right thing to do
- Point source = technology-based treatment for largest facilities
- Targeted NPS actions = greatest results

# Importance of Nutrient Reduction



- Growth of nuisance aquatic plant life (algae/others)
  - Loss of biological resources
- Stimulates activity of microbes harmful to health
  - Animal deaths reported
  - Human concerns
    - ✦ Contact recreation
    - ✦ Consumption of toxins
- Taste and odor problems in drinking water

# Program Update (cont'd)



- 236 waters listed as impaired for water quality in 2002 are now meeting water quality standards and were removed from the Kansas list of impaired waters.
- The Kansas Nonpoint Source program was recognized nationally for numerous successful watershed restoration and protection strategy (WRAPS) projects. The WRAPS program utilizes local watershed leadership to work with the residents of the those watersheds in improving water quality by employing cost effective best management practices.

# Program Achievements



- Bureau of Waste Management
- Provided regulatory oversight and technical assistance related to debris management from major tornados in Reading, Harveyville, and Wichita, and facilitated debris disposal from the massive tornado that struck Joplin, Missouri.
- Worked with the Board of Pharmacy to develop and implement a medication take-back program at pharmacies and HHW facilities.

# Achievements (BWM continued)



- Worked with the KCC, KSU agronomists, and other stakeholders to develop a land-spreading program for drilling waste generated by horizontal drilling for oil and gas.

# Storm Debris - Harveyville





# Storm Debris – Harveyville





# Storm Debris - Wichita

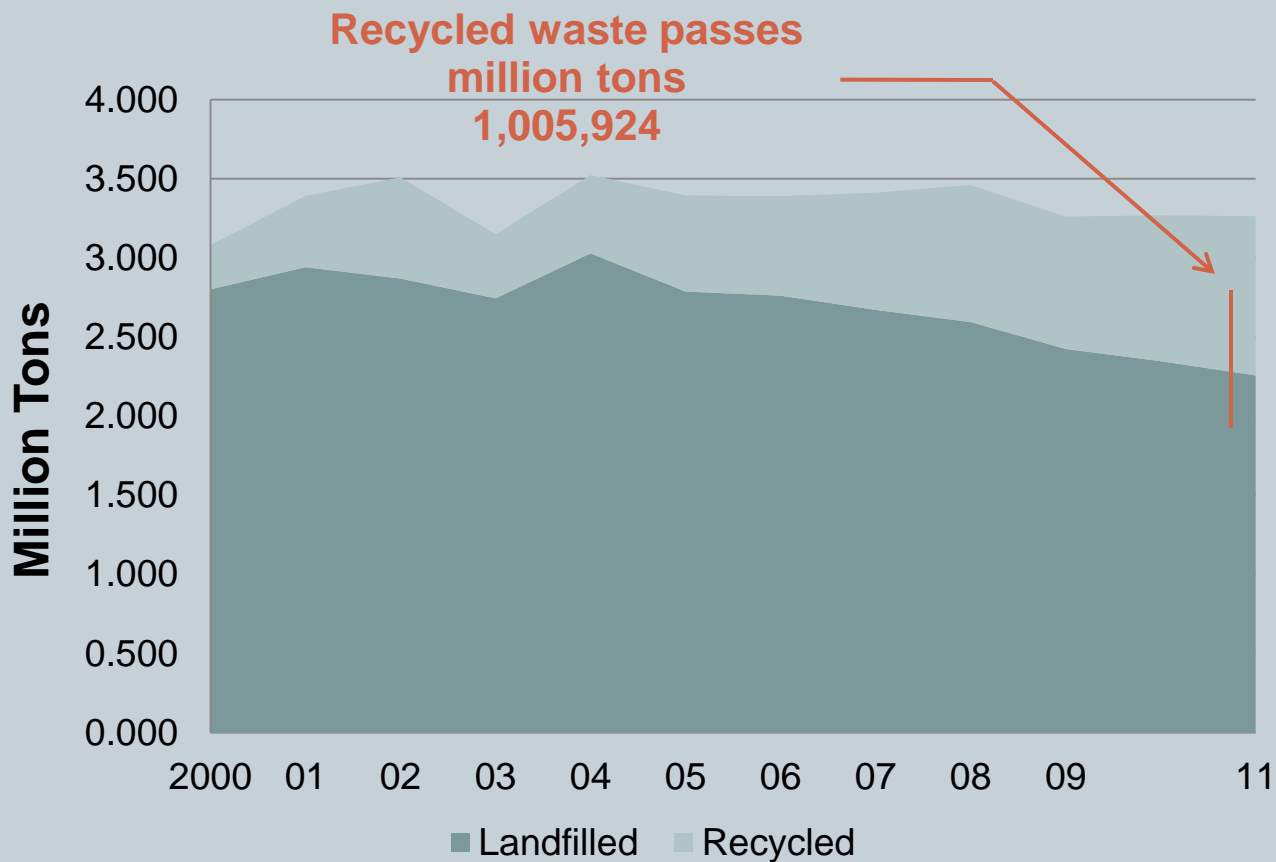




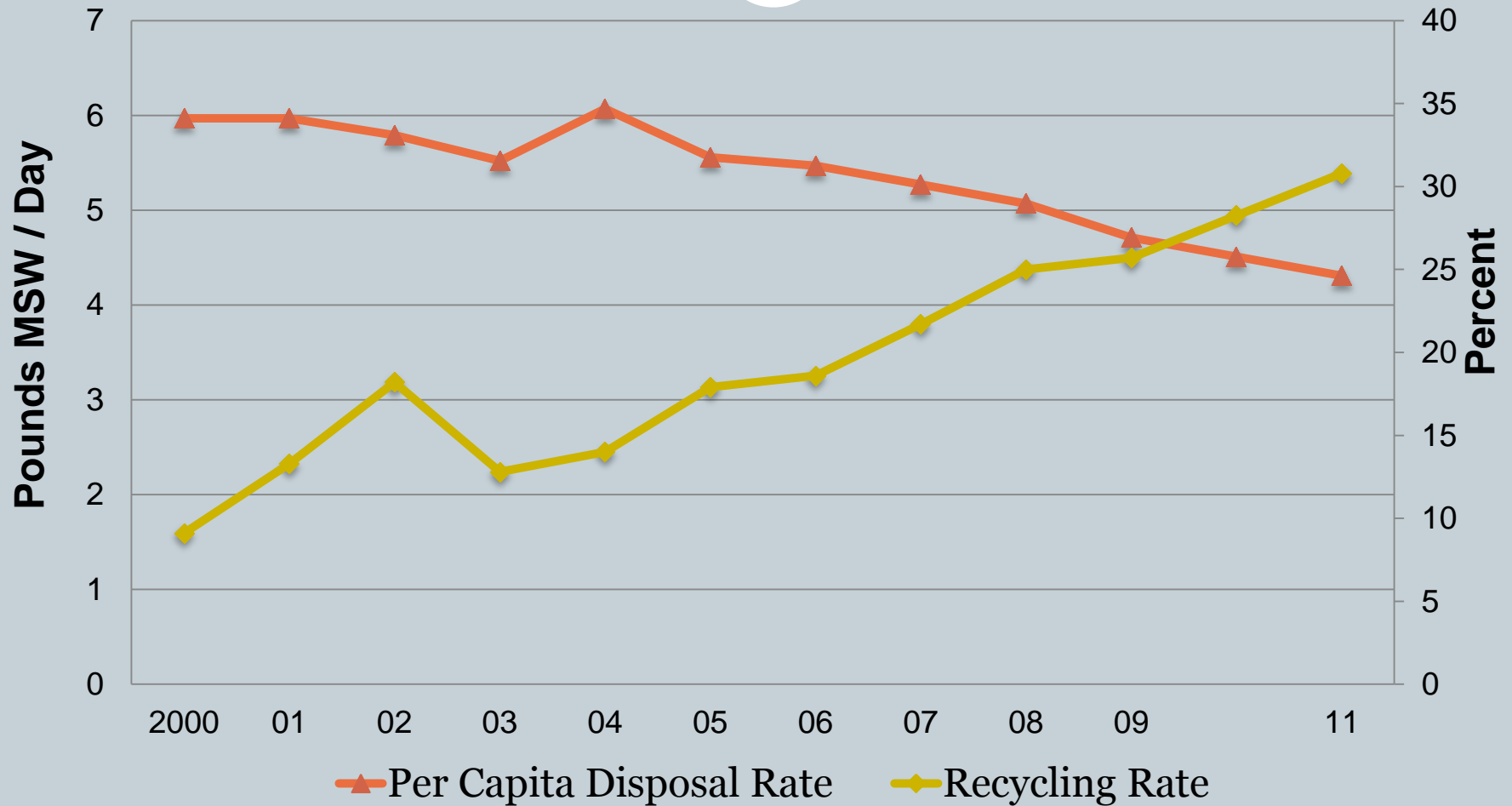
# Storm Debris - Wichita



# Kansas MSW Disposal and Recovery Trends



# MSW Recycling and Disposal Rates



# Recent Changes



- Bureau of Waste Management:
  - Has assumed full responsibility for all solid waste program activities, some of which had previously been administered by BER.
  - BWM is presently seeking authorization from US EPA for RCRA Corrective Action, which when accomplished, will mean Kansas will be responsible for the entire hazardous waste program in the state.

# Program Achievements



## Bureau of Environmental Remediation

- Completed the Superfund buyout and relocation of residents in Treece, Kansas, a small town of 120 residents located on the Oklahoma state line in Cherokee County within the Tri-State Mining district.
- Collaborated with the City of Lawrence in paralleling redevelopment with remediation thereby transforming a contaminated site into a sustainable commercial redevelopment opportunity.

# Achievements (BER continued)



- Encouraged reuse of abandoned gas station properties, provided assistance to cities and towns with property redevelopment, and encouraged real estate transactions of properties with USTs through use of the Kansas UST Property Redevelopment Trust Fund.

# Treece Relocation



- 2006 – Residents adopt resolution requesting relocation similar to that in Picher, Oklahoma
- 2007 – Kansas legislation formed Trust to perform voluntary relocation
- 2009 – Federal funding appropriated / agreements developed to perform relocation
- 2010 – Trustees appointed
- Majority of properties have accepted relocation
- Bob Jurgens will be presenting on this topic during the closing plenary session tomorrow.

# Lawrence Farmland Plant



- Site consisted of 467 unproductive acres on east side of Lawrence
- 2010 – City of Lawrence signed agreement with KDHE and took over the property with plans for industrial and business park expansion
- Since then, city has demolished structures
- City plans to implement a redevelopment plan as the environmental cleanup is ongoing
- Project will increase private employment opportunities and strengthen city tax base



# 2012 Storage Tank Legislation



- SB 406 amended the Storage Tank Act to replace the Essential Fuels Supply Trust Fund with the UST Property Redevelopment Fund. The program provides reimbursement for removal of USTs if pre-approved by KDHE. This change assists owners of properties with USTs with the cost of permanent closure of out of service tanks to encourage property redevelopment.
- SB 406 also extended sunset date for UST and AST reimbursement funds until 2024.
- Randy Carlson will present on this topic at 9:30.

# Anticipated 2013 Tank Legislation



- KDHE plans to propose changes to the Storage Tank Act to add the requirement for secondary containment on new tank installations, to satisfy USEPA requirements.
- Kansas is last state in the nation to take this step.

# Program Achievements



- Bureau of Environmental Field Services
  - Investigated complaints of possible harmful algae blooms at 40 lakes throughout Kansas. Over 250 algae and nutrient samples have been collected and analyzed.
  - Assisted with the Joplin tornado response by identifying landfilling options in southeast Kansas for debris disposal. Conducted 80 focused inspections and 8 solid waste compliance inspections at facilities approved to receive Joplin debris.

# Achievements (BEFS continued)



- Underwent reorganization in early 2012 to improve functionality of the bureau.
- BEFS water quality programs were absorbed within the Bureau of Water.
- BEFS continues to conduct regulatory compliance inspections and complaint investigations, and provides information and compliance assistance to the public through a variety of small business outreach activities.

# Harmful Algae Blooms



*Pictures courtesy of Lisa Davies, Junction City/Geary County Health Department Milford Lake 2011*



*Pictures courtesy of Lisa Davies, Junction City/Geary County Health Department Milford Lake 2011*

# Division Challenges



- 2011 Voluntary Retirements
  - Division of Environment lost 11 positions
    - ✦ Bureau of Water
      - Bureau Director – Karl Mueldener
      - Two Section Chiefs
    - ✦ Bureau of Air
      - One Section Chief
    - ✦ KHEL

# Challenges (continued)



- Numerous vacant positions eliminated
- Reduction in SGF funding
- Future:
  - Continued pressure to reduce staffing
  - Continued pressure to reduce SGF expenditures
  - Possibility of reductions in federal grants

“Doing more with less” is the reality.

# Pollution Prevention



- KDHE P2 program projects:
- *Kansas Environmental Conference*
- *P2 Awards*
- *Kansas Environmental News* –which is no longer printed but is available electronically. Go to [www.kdheks.gov/sbcs](http://www.kdheks.gov/sbcs) to sign up to receive the electronic newsletter.





# Kansas P2 Intern Program

## Environmental Impacts

IMPACTS	2006*	2007*	2008*	2009	2010	2011	TOTAL
Water conservation	N/A	25.3 million gallons	187.1 million gallons	9.9 million gallons	22.2 million gallons	6 million gallons	250 million gallons
Waste reduction	1,025 tons	5,506 tons	1,707 tons	480 tons	585 tons	318 tons	9,621 tons
Energy conservation	1,533,201 KWh	7,066,113 KWh	26,019,199 KWh	8,7050,859 KWh	6,158,532 KWh	5,720,000 kWh	55,203,000 KWh
Operating/disposal savings	\$0.4 million	\$1.5 million	\$3.5 million	\$0.7 million	\$1.2 million	\$0.4 million	\$7.8 million
Greenhouse Gases	1,089 MTCO <sub>2</sub> e	5,079 MTCO <sub>2</sub> e	18,921 MTCO <sub>2</sub> e	6,207 MTCO <sub>2</sub> e	7,015 MTCO <sub>2</sub> e	4,000 MTCO <sub>2</sub> e	42,310 MTCO <sub>2</sub> e

\* Implementation rate assessed in 2009 – 66%  
2011 data pending

# REAL-WORLD INDUSTRY EXPERIENCE



Source: KSU Pollution Prevention Institute

# Key DOE Staff



- Rick Brunetti – Bureau of Air
- Mike Tate – Bureau of Water
- Bill Bider – Bureau of Waste Management
- Gary Blackburn – Bureau of Environmental Remediation
- Leo Henning – Bureau of Environmental Field Services / Kansas Health and Environmental Laboratories

# Questions?



## Contact Information:

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